

TRANSMITTAL



PTO/SB/21 (08-00)

10/714,255

type a plus sign (+) inside this box \Rightarrow + Approved for use through 10/31/02. OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application Number

EOD1		Filing Date	November 14,	2003
FORM		First Named Inventor	Carlo Ballatore	e, et al.
		Group Art Unit	Unassigned	
(to be used for all correspondence after initial	filing)	Examiner Name	Unassigned	
Total Number Of Pages In This Submission	8	Attorney Docket No.	NB 2020.01	
E	NCLOS	URES (check all that	apply)	
Fee Transmittal Form		signment Papers an Application)		After Allowance Communication to Group
· Fee Attached	Dra	wing(s)		Appeal Communication to Board of Appeals and Interferences
Amendment / Reply	Lice	ensing-related Papers		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
After Final	Pet	ition		Proprietary Information
Affidavits/declarations		ition to Convert to a visional Application		Status Letter
Extension of Time Request		ver of Attorney, Revocation ange of Correspondence Add	dress	Other Enclosure(s) (please identify below):
_	Ten	minal Disclaimer		5 cited references and Return Postcard
Express Abandonment Request	Red	quest for Refund		5 died felelences and fletam i ostoard
Information Disclosure Statement w/PTO/SB/08a & b	CD,	, Number of CD(s)		
Certified Copy of Priority Document(s)	Remarks			
Response to Missing Parts/ Incomplete Application				
Response to Missing Parts under 37 CFR 1.52 or 1.53				
SIGNATU	RE OF A	APPLICANT, ATTORN	EY OR AGE	ENT
Firm Antoinette F. Konski				
Bingham McCutchen LL Or Three Embarcadero Ce	nter, Suite 1	1800		
Individual Name San Francisco, Californi	ia 94111			
Signature ///www.line	TO O	Men hi		
Date Sept. 25	3, 20	04		
		IFICATE OF TRANSMISSIO	NC	
I hereby certify that this paper and all enclosures are bein Alexandria, VA 22313-1450.	ng sent first	class mail on the date indicated	below to the Com	missioner for Patents, P.O. Box 1450,
September 23, 2004	Leggy	Nichols		Peggy Nichols

Burden Hours Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

PATENT Docket No. NB 2020.01



CERTIFICATE OF MAILING

I hereby certify that this paper or fee is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date listed below.

Dated: September 23, 2004

Examiner: Not Yet Assigned

Group Art Unit: 1623

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for:

Carlo BALLATORE et al.

Serial No.: 10/714,255

Filing Date: November 14, 2003

For: PEPTIDE DEFORMYLASE

ACTIVATED PRODRUGS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Supplemental Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached forms PTO/SB/08a and PTO/SB/08b.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicants is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicants as such.

I. Timing of the Information Disclosure Statement:

This Information Disclosure Statement is filed:

with the new patent application submitted herewith (3/C.F.R. § 1.9/(a)).
Within three months after the filing date of the application (37 C.F.R. § 1.97(b) or
within three months after the date of entry of the national stage of a PCT
application as set forth in 37 C.F.R. § 1.491.

\bowtie	Before the mailing date of a first Office action on the merits. In the event,
	however, that an Office Action has crossed in the mail with this Information
	Disclosure Statement, the Commissioner is hereby authorized to charge Deposit
	Account No. 50-2518 for any fees required pursuant to
	37 C.F.R. §§ 1.17(p) or 1.17(i)(1).
This Informa	tion Disclosure Statement is filed:
	After the first Office Action and more than three months after the application's
	filing date; or PCT national stage date of entry filing but, as far as is known to the
	undersigned, prior to the mailing date of either a final rejection or a notice of
	allowance, whichever occurs first, and the Commissioner is hereby authorized to
	charge Deposit Account No. 50-2518 for the fee (\$180) set forth in 37 C.F.R.
·	§ 1.17(p) and any additional required fees.
This Informa	tion Disclosure Statement is filed:
	After the mailing date of either a final rejection or a notice of allowance,
	whichever occurred first, and is accompanied by the fee (\$180.00) set forth in 37
	C.F.R. § 1.17(i)(1) and a certification as specified in 37 C.F.R. § 1.97(e), as
	checked below. This document is to be considered as a petition requesting
	consideration of the Information Disclosure Statement.
The undersig	ned certifies that:
	Each item of information contained in the Information Disclosure Statement was
	first cited in any communication mailed from a foreign patent office in a
	counterpart foreign application not more than three months prior to the filing of
	this information disclosure statement.
	No item of information contained in this information disclosure statement was
	cited in a communication mailed from a foreign patent office in a counterpart
	foreign application or, to the knowledge of the undersigned after making
	reasonable inquiry, was known to any individual designated in
	37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information
	Disclosure Statement.

Serial No.: 10/714,255 Docket No.: NB 2020.01

II.	Co	pies of	the Cited Items:
		Copies	of all of the items listed on the attached forms PTO/SB/08a and PTO/SB/08b are
		enclose	ed.
\boxtimes		Copies	of only the following items listed on the attached form PTO/SB/08b (Items 26-30)
		are end	closed. Copies of these items were cited in a foreign examination report in a
		related	case. A copy of the search reports and the cited references not already of record
		in this	application are attached hereto.
\boxtimes		Copies	of the following documents listed in PTO/SB/08a (Item Nos. 1-7) and copies of
		the foll	lowing documents listed in PTO/SB/08b (Item 1-25) were previously cited by the
		Office	or submitted in Information Disclosure Statements in related application U.S.
		Serial 1	No. 10/142,089 filed May 9, 2002, and accordingly, copies are not included
		herewi	th. See 37 C.F.R. § 1.98(d). The Examiner is requested to make these documents
		of reco	rd.
	_		
III.	C		Explanation of Relevance:
		\boxtimes	A concise explanation of relevance of the items listed on Forms PTO/SB/08 is not
			given.
			A concise explanation of relevance of [some of] the items listed on Form
			PTO/SB/08 is in the form of an English language copy of a Search Report from a
			foreign patent office, issued in a counterpart application, which refers to the
			relevant portions of the references (copy attached).
IV	R	elated	Applications:
- '	• •		Applicants bring to the Office's attention the following related, co-pending
			application(s): U.S. Serial No. 10/142,089, filed May 9, 2002.
V.	C	onclusi	on:
Cita	atio	n of the	above documents shall not be construed as:
		1.	an admission that the documents are necessarily prior art with respect to the

2. a representation that a search has been made, other than as described above; or

3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

Serial No.: 10/714,255 Docket No.: NB 2020.01

instant invention;

It is respectfully requested that the Examiner indicate consideration of the cited references by returning a copy of the attached form PTO/SB/08a and PTO/SB/08b with initials or other appropriate marks. The Commissioner is hereby authorized to charge Deposit Account No. 50-2518, billing reference number: 2023896-7008422002 for any additional fees required in connection with the filing of this Information Disclosure Statement.

Respectfully submitted,

Dated: September 23, 2004

Antoinette F. Konski Registration No. 34,202

Bingham McCutchen LLP Three Embarcadero Center, Suite 1800 San Francisco, California 94111-4067

Telephone: (650) 849-4950 Facsimile: (650) 849-4800

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Inder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

etitute for form1449A-PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	

Complete if Known				
Application Number	10/714,255			
Filing Date	November 14, 2003			
First Named Inventor	Carlo BALLATORE et al.			
Art Unit	1623			
Examiner Name	Not Yet Assigned			
Attorney Docket Number	NB 2020.01			

U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines,
Initials*	No. ¹	Number – Kind Code ² (if known)	MM-DD-YY	Application of Cited Document	Where Relevant Passages or Relevant Figures Appear
	1	US-6,159,706	12-12-2000	Shepard	
	2	US-6,245,750	06-12-2001	Shepard	
	3	US-6,339,151	01-15-2002	Shepard et al.	
•••		US-			
		US-			
		US-			
\ -		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ – Number ⁴ – Kind Code ⁵ (if known)	Publication Date MM-DD-YY	Name of Patentee or Application of Cited	Pages, Columns, Lines, Where Relevant Passages		
muais	140.	Country Code - Number - Killa Code (ii Known)	IVIIVI-DD-11	Document	or Relevant Figures Appear	T⁰	
	4	WO 99/08110	02-18-1999	NewBiotics, Inc.		<u> </u>	
	5	WO 99/37753	07-29-1999	NewBiotics, Inc.			
	6	WO 01/07454 A1	02-01-2001	NewBiotics, Inc.			
	7	WO 98/13059 A	04-02-1998	Squibb Bristol Myers	·	\vdash	
						┢	
			-				
	<u> </u>					Π	

		_		
Exam Signa	niner's ature		Date Considered	

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449B-PTO 10/714,255 **Application Number November 14, 2003** Filing Date INFORMATION DISCLOSURE **First Named Inventor** Carlo BALLATORE, et al. STATEMENT BY APPLICANT Art Unit 1623 **Examiner Name** Unassigned (use as many sheets as necessary) Sheet 1 of 2 Attorney Docket Number NB 2020.01

		NON PATENT LITERATURE DOCUMENTS	
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal,	T
Initials*	No.1	serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published	ı
	1	APFEL, C. et al. "Hydroxamic acid derivatives as potent peptide deformylase inhibitors and antibacterial agents" (2000) J. Med. Chem. 43:2324-2331	
	2	APFEL, C.M. et al. "Peptide deformylase as an antibacterial drug target: Assays for detection of its inhibition in escherichia coli cell homogenates and intact cells" (April, 2001a) Anti. Agents and Chemo. 45(4):1053-1057	
	3	APFEL, C.M. et al. "Peptide deformylase as an antibacterial drug target: Target validation and resistance development" (April, 2001b) Anti. Agents and Chemo. 45(4):1058-1064	
	4	BECKER, A. et al. "Iron center, substrate recognition and mechanism of peptide deformylase" (1998) Nat. Struct. Biol. 5(12):1053-1058	
	5	CHAN, Michael K. et al. "Crystal structure of the escherichia coli peptide deformylase" Biochem. (1997) 36:13904-13909	
	6	CHEN, D.Z. et al. "Actinonin, a naturally occurring antibacterial agent, is a potent deformylase inhibitor" (2000) Biochem. 39(6):1256-1262	
	7	CLEMENTS, J.M. et al. "Antibiotic activity and characterization of BB-3497, a novel peptide deformylase inhibitor" (February, 2001) Anti. Agents and Chemo. 45(2):563-570	
	8	de GROOT, F.M.H. et al. "Synthesis and biological evaluation of 2'-carbamate-linked and 2'-carbonate-linked prodrugs of paclitaxel: selective activation by the tumor-associated protease plasmin" (2000) <i>J. Med. Chem.</i> 43:3093-3102	
	9	DUBOWCHICK, G.M. et al. (1998) Cathepsin B-sensitive dipeptide prodrugs. 1. A model study of structural requirements for efficient release of doxorubicin, <i>Bioorg & Medicinal Chem. Letters</i> 8(23):3341-3346.	
	10	DURAND, D.J. et al. "Peptide deformylase inhibitors of bacterial peptide deformylases" (July 15, 1999) Arch. Biochem. And Biophysics. 367(2): 297-302	
	11	GIGLIONE, C. et al. "Peptide deformylase as a target for new generation, broad spectrum antimodrobial agents" (2000a) <i>Mol. Microbiol.</i> 36 (6):1197-1205	
<u> </u>	12	GIGLIONE, C. et al. "Identification of eukaryotic peptide deformylases reveals universality of N-terminal protein processing mechanisms" <i>EMBO J.</i> (2000b) 19 (21):5916-5929	
	13	HAO, B. et al. "Structural basis for the design of antibiotics targeting peptide deformylase" (1999) <i>Biochem.</i> 38 (15):4712-4719	
	14	HU, Y.J. et al. "H-phosphonate derivatives as novel peptide deformylase inhibitors" (1998) <i>Bioorg Med Chem Letts</i> . 8 (18):2479-2482	
	15	HUNTINGTON, K.M. et al. "Synthesis and antibacterial activity of peptide deformylase inhibitors" (2000) <i>Biochem.</i> 39 (15):4543-4551	
	16	JAYASEKERA, M.M.K. et al. "Novel nonpeptidic inhibitors of peptide deformylase" (Sept. 15, 2000) Arch. Biochem. & Biophys. 381(2):313-316	
	17	LACKEY, D.B. et al. (2001) Enzyme - catalyzed therapeutic agent (ECTA) design: activation of the antitumor ECTA compound NB 1011 by thymidylate synthase, <i>Biochem. Pharmocology</i> 61:179-189	
	18	MEINNEL, T. "Vers une conception rationnelle de nouveaux agents antibactériens" (1999) Pathol. Biol. 47(8):780-783	

Examiner's	Date	
Signature	Considered	
o.g.nataro	00110100100	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	•				Complete if Known		
Substit	ute for form 1449B	I-PTO			Application Number	10/714,255	
INFORMATION DISCLOSURE				SURF	Filing Date	November 14, 2003	
	STATEMENT BY APPLICANT				First Named Inventor	Carlo BALLATORE, et al.	
				ANI	Art Unit	1623	
	(use a	as many shee	ets as necessar	y)	Examiner Name	Unassigned	
	Sheet	2	of	2	Attorney Docket Number	NB 2020.01	

		NON PATENT LITERATURE DOCUMENTS	,		
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal,	7		
Initials*	No.1	serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published			
	19	MEINNEL, T. et al. "Methionine as translation start signal: A review of the enzymes of the pathway in <i>Escherichia coli</i> " (1993) <i>Biochimie.</i> 75 (12):1061-1075			
	20	RAGUSA S., et al. "Control of Peptide deformylase activity by metal cations" (1998) <i>J.Mol.Biol.</i> , 280 :551-523			
	21	RAJAGOPALAN, P.T.R. et al. "Purification, characterization, and inhibition of peptide deformylase from <i>Escherichia coli</i> " (1997) <i>Biochem.</i> 36 (45):13910-13918			
	22	RAJAGOPALAN, P.T.R. et al. "Oxygen-mediated inactivation of peptide deformylase" (August 28, 1998) J. Biol Chem. 273(35):22305-22310			
	23	WEI Y. et al. "Continuous spectrophotometric assay of peptide deformylase" (1997) Anal Biochem. 250(1):29-34			
	24	WEI, Y. et al. "Identification of a potent peptide deformylase inhibitor from a rationally designed combinatorial library" (2000a) <i>J Comb Chem.</i> 2 (6):650-657			
	25	WEI, Y. et al. "Activiation of antibacterial prodrugs by peptide deformylase" (2000b) Bioorg Med Chem Letts. 10(10):1073-1076			
	26	BODUSZEK BOGDAN, English Abstract "Synthesis of novel Phosphonopeptides derived from pyridylmethylphosphonate diphenyl esters			
	27	LIU, et al. English Abstract "Synthesis and anticancer activities of new 5-fluorouracil-1-yl phosphonotripeptides"			
	28	Copy of Written Opinion for PCT/US02/14500			
	29	Copy of International Search Report for PCT/US02/36124			
	30	Copy of European Supplemental Search Report for EP Appl. No. 02741696.5			
		·			
			_		
			_		
aminer's		Date			

Examiner's	Date	e
Signature	Cons	sidered

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.